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EXAMINER
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CHEUNG, WILLIAM K

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/766,430  
Filing Date: January 28, 2004  
Appellant(s): GIBSON ET AL.

\_\_\_\_\_  
Jeseph F. Posillico  
(Registration No. 32,290)  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed March 27, 2008 appealing from the Office action mailed April 24, 2007.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

US 3,635,856

Kaneko et al.

Product literature of Mitsubishi-Kagaku Food Corporation, Copywrite 2002 (c) obtained from website <http://www.mfc.co.jp/english/index.htm>.

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

#### **Claim Rejections - 35 USC § 102**

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-18, 67 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaneko et al. (US 3,635,856) as affirmed by product literature of Mitsubishi-Kagaku Food Corporation, copyright 2002 (c) obtained from website <http://www.mfc.co.jp/english/index.htm>, for the reasons adequately set forth from paragraph 3 of the office action of April 24, 2007.

Kaneko et al. (col. 1, line 42-47; col. 3, line 9-30; col. 4, line 45-60; col. 5, line 25-45; col. 5-6, examples I and II) disclose a process for extruding a resin-containing composition comprising: a) providing an extrudable mass comprising at least one extrudable resin and saccharide ester; and b) extruding said extrudable mass to produce an extrudate. As affirmed by product literature of Mitsubishi-Kagaku Food Corporation, copyright 2002 (c), the saccharide ester of Kaneko et al. has a structure that is substantially identical to the saccharide ester of Formula (I) as claimed.

Regarding claims 2-14, Kaneko et al. clearly disclose an amount of saccharide ester for the extruded composition. Regarding the recited “to improve...” of claims 2-14, appellants must recognize that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). In view of the reasons set forth above, Claims 1-18, 67 are anticipated.

3. Claims 71-75 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaneko et al. (US 3,635,856) as affirmed by product literature of Mitsubishi-Kagaku Food Corporation, copyright 2002 (c) obtained from website <http://www.mfc.co.jp/english/index.htm> for the reasons adequately set forth from paragraph 4 of the office action of April 24, 2007.

Kaneko et al. (col. 1, line 42-47; col. 3, line 9-30; col. 4, line 45-60; col. 5, line 25-45; col. 5-6, examples I and II) disclose a process for extruding a resin-containing composition comprising: a) providing an extrudable mass comprising at least one extrudable resin and saccharide ester; and b) extruding said extrudable mass to produce an extrudate. As affirmed by product literature of Mitsubishi-Kagaku Food

Corporation, copyright 2002 (c), the saccharide ester of Kaneko et al. has a structure that is substantially identical to the saccharide ester of Formula (I) as claimed. Kaneko et al. (col. 6, table 1 and 2) clearly disclose compositions comprising polyvinyl chloride.

4. Claims 76-85 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaneko et al. (US 3,635,856) as affirmed by product literature of Mitsubishi-Kagaku Food Corporation, copyright 2002 (c) obtained from website <http://www.mfc.co.jp/english/index.htm> for the reasons adequately set forth from paragraph 5 of the office action of April 24, 2007.

Kaneko et al. (col. 1, line 42-47; col. 3, line 9-30; col. 4, line 45-60; col. 5, line 25-45; col. 5-6, examples I and II) disclose a process for extruding a resin-containing composition comprising: a) providing an extrudable mass comprising at least one extrudable resin and saccharide ester; and b) extruding said extrudable mass to produce an extrudate. As affirmed by product literature of Mitsubishi-Kagaku Food Corporation, copyright 2002 (c), the saccharide ester of Kaneko et al. has a structure that is substantially identical to the saccharide ester of Formula (I) as claimed. Kaneko et al. (col. 6, Table 1 and 2) disclose compositions comprising calcium stearate.

Regarding the claim 76 where each R is an aliphatic moiety of about 12 to about 26 carbon atoms, appellants must recognize that the two lines above the chemical structure disclosed clearly indicate compounds ranging from sucrose mono to octa fatty acid ester can be produced. Because fatty acid ester typically have carbons in the range

of about 12 to about 26, the examiner has a reasonable basis that this claimed feature is inherently possessed in disclosed structure.

Regarding claim 83, appellants must recognize that calcium stearate commercially comprises unreacted calcium hydroxide and stearic acid.

Regarding claims 84 and 85, Kaneko et al. (col. 6, line 57-68) clearly disclose a composition comprising oxidized oil and zinc stearate, which is a stabilizer typically for PVC.

In view of the reasons set forth above, Claims 76-85 are anticipated.

#### **(10) Response to Argument**

Appellant's arguments filed March 27, 2008 and affidavits filed January 10, 2007 have been fully considered but they are not persuasive.

Appellants argue that Kaneko et al. do not anticipate the claimed invention because there are nine species within the genus of "sucrose alkyl esters" by including a unsubstituted sucrose as a species. However, the examiner disagrees because there are only eight species within the genus of "sucrose alkyl esters" because the unsubstituted sucrose is not a sucrose alkyl ester. Further, regardless eight or nine, the number of species within the disclosed "sucrose alkyl esters" teachings of Kaneko et al. is quite small, it would not be difficult to one of ordinary skill in art to recognize and appreciate each of the species individually within the genus as taught in Kaneko et al.

Although appellants argue that Kaneko et al. (col. 4, line 46-53) disclose an embodiment that include mono-esters or diesters of fatty acids, appellants must

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recognize that the preferable embodiments do not teach away from the broad teachings of 8 species of sucrose alkyl esters as taught in Kaneko et al. (col. 3, line 9-30).

The aforesaid sucrose alkyl esters, to be used in accordance with this invention, appear to serve to impart a considerable degree of thermal stability to a PVC composition to be subjected to an elevated temperature during working. Therefore, the transparency of the final product is improved to a great extent, so far as they are added together with a stabilizer composed of a mixture of said metal salt(s), polyhydric alcohol and the like to the PVC composition. The reason why the foregoing sucrose alkyl esters are useful for the purpose intended, namely, for the production of shaped bodies or articles having improved transparency and free from becoming cloudy with the lapse of time, will be considered as follows. They lower the melting points of polyhydric alcohols by the formation of eutectic mixtures therewith and serve to make said metal salts of fatty acid readily dispersible within and over the entire body of a PVC composition during the course of blending or kneading by means of a working machine by virtue of its activity as a surface active agent, so that there is yielded an intimate and homogeneous PVC blend or composition which is capable of being easily worked.

Regarding appellants' argument that Kaneko et al. do not anticipate the claimed invention because the examiner acknowledges that Kaneko et al. are silent on "a mixture" of sucrose alkyl esters or a "partially esterified sucrose ester", appellants fail to recognize the meaning of the sentence set forth (office action issued on April 24, 2007, page 5-6) because the examiner is intended to indicate that each of the eight species as taught within Kaneko et al. can be used individually, not as a mixture of partially esterified sucrose esters.



Nevertheless, Kaneko et al. clearly teach the incorporation of sucrose alkyl esters, which generically include each and individually of the eight species of sucrose alkyl esters having different number of ester groups (mono-, di-, tri-, tetra-, penta-, hexa-, penta-, octa- sucrose alkyl esters). Since Kaneko et al. are silent on "a mixture" of sucrose alkyl esters or "a partially esterified" sucrose ester, the examiner has a reasonable basis to interpret the recited "sucrose alkyl esters" to mean "a sucrose alkyl ester" that has been fully esterified (100 wt% octa-substituted). The use of the product literature of Mitsubishi-Kagaku Food Corporation is merely to affirm the backbone structure of the claimed "sucrose structure" of the Formula I of claim 1. In view of the reasons set forth above, the rejection of claims 1-18, 67, 71-85 set forth in the office action of August 11, 2006 is proper.

Regarding appellants' argument that "unexpectedly found .... desirable properties and other unexpected advantages", appellants fail to recognize that the presentation of "unexpected results" is an effective method for overcoming a 103 rejection, but the presentation of "unexpected results" is ineffective in overcoming a 102(b) rejection.

Regarding the "unexpected results" in the affidavits of January 10, 2007, the comparative data is based on the wrong assumption that Kaneko et al. only disclose a mixture of "sucrose alkyl esters", and does not provide any evidence that the teachings of Kaneko et al. do not embrace a mixture of "sucrose alkyl esters". Therefore, the argued "unexpected results" fail to show the criticality of the claimed invention, assuming that the claimed invention is 103 rejected.

Appellants argue that the use of the product literature of Mitsubishi-Kagaku Food Corporation as a reference to affirm the structure of the saccharide ester of Kaneko et

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al. is improper because the structure as shown in the product literature of Mitsubishi-Kagaku Food Corporation is not an octa-ester. However, appellants fail to recognize that the two lines above the chemical disclosed clearly indicate compounds ranging from sucrose mono to octa fatty acid ester can be produced. In view of small number of ester species disclosed, the octa ester feature is inherently possessed in Kaneko et al. Therefore, the 102 rejection set forth is proper.

Regarding appellants' argument that In re Casey and In re Otto is pertained to machinery and therefore not applicable to the invention as claimed because the claimed invention is not directed to machinery, the examiner disagrees because "intended use" teachings in In re Casey and In re Otto are not limited to machinery.

Regarding appellants' argument on HLB ranges, in view of substantially identical composition disclosed in Kaneko et al. and the composition as claimed, the examiner has a reasonable basis to believe that the argued HLB is inherently possessed in Kaneko et al. Further, the argued HLB values are not supported by the claims because the claims fail to recite any HLB values.

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

/William K Cheung/

Primary Examiner, Art Unit 1796

Respectfully submitted,

William K. Cheung, Ph. D.

Primary Examiner

Conferees:

David Wu, SPE

/David Wu/

Supervisory Patent Examiner, Art Unit 1796

/Gregory L Mills/

Supervisory Patent Examiner, Art Unit 1700